

REMARKS

Claims 1-20 are present in the pending application and have been subjected to restriction by the Examiner under PCT Rule 13.1 as follows:

- I. Claims 1-5, drawn to a nucleic acid encoding LGC1.
- II. Claims 1-5, drawn to a nucleic acid encoding gcH2A.
- III. Claims 1-5, drawn to a nucleic acid encoding gcH3.
- IV. Claims 6-15 and 19-20, drawn to a LGC1 promoter and a method of using it to induce male sterility.
- V. Claims 6-7, 11-14 and 19-20, drawn to a gcH2A promoter and a method of using it to induce male sterility.
- VI. Claims 6-7, 11-14 and 19-20, drawn to a gcH3 promoter and a method of using it to induce male sterility.
- VII. Claims 16-18, drawn to a construct comprising a LGC1 promoter and a transposase coding sequence.

The Examiner alleges that the inventions listed as Groups I-VIII "do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, these groups lack the same or corresponding special technical features."

More specifically, the Examiner alleges that Groups I-III are unrelated to each other because these groups are drawn to different nucleotide sequences which encode different proteins and are structurally distinct chemical compounds. The Examiner also alleges that Groups IV-VI are unrelated to each other because these groups are drawn to different promoters and are structurally distinct chemical compounds.

The Examiner further alleges that Groups I-III are unrelated to Groups IV-VII because the molecules of Groups I-III and the promoters of Groups IV-VII have different modes of operation, different functions, and different effects. The Examiner states that the promoters of Groups IV-VII can be used to direct the expression of genes other than those of Groups I-III, for example, a ribonuclease. Alternatively, the genes of Groups I-III can be expressed under promoters other than those of Groups IV-VII, for example, the CaMV 25S promoter or a light-inducible promoter.

Finally, the Examiner alleges that Group IV is unrelated to Group VII. The Examiner states that although both groups are drawn to DNA constructs comprising a sperm-specific promoter, these constructs are not drawn to a single promoter sequence, but a multitude of sperm-specific promoters. Thus, the Examiner contends that unity of invention is lacking. The Examiner also contends that Group IV and Group VII are unrelated because Group VII, but not Group IV, requires a transposase coding sequence, whereas Group IV, not Group VII, requires a cytotoxic nucleic acid.

In order to be fully responsive to the Examiner's requirements for restriction, Applicants provisionally elect, with traverse, to prosecute the subject matter of Group I, Claims 1-5, drawn to an isolated nucleic acid molecule encoding LGC1. However, pursuant to 37 C.F.R. §§1.111 and 1.143, Applicants hereby traverse the Examiner's requirement for restriction and request reconsideration thereof in view of the following remarks.

A requirement for restriction presupposes an analysis of the subject application in light of the rules governing this practice, i.e., 37 C.F.R. §1.499 and PCT Rules 13.1 and 13.2. PCT Rule 13.1, first sentence, states: "The international application shall relate to one invention

only or to a group of inventions so linked as to form a single general inventive concept ("requirement of unity of invention")." (Emphasis added.)

Applicants submit that Groups I-VIII are not distinct as the Examiner has alleged, but rather represent one single inventive concept warranting examination in a single application. Specifically, the nucleic acid molecules of Groups I-III (i.e., the LGC1, gcH2A and ghH3-encoding genes) are all specifically expressed in generative cells and sperm cells and are useful for generating male sterile plants. The promoters of Groups IV-VII are the promoters from the LGC1, gcH2A and ghH3-encoding genes of Groups I-III, and can be used in directing tissue specific expression in generative cells and sperm cells. Thus, the claims are interrelated and interdependent, and are linked to each other under a single general inventive concept.

Applicants further submit that under 37 C.F.R. §1.475(a), "unity of invention shall be fulfilled only when there is a technical relationship among those inventions involving one or more of the same or corresponding technical features. The expression "technical features" shall mean those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art." It is respectfully submitted that the generative and sperm-cell specific expression of the nucleic acid molecules of Groups I-III and the ability of directing a generative and sperm-cell specific expression of the promoters of Groups IV-VII, when considered as a whole, constitute a special technical feature which defines a single and specific contribution over the prior art. Thus, it is respectfully submitted that the instant claims satisfy the requirements for unity of invention.

Finally, Applicants respectfully submit that a determination to make the pending restriction requirement final must evidence the patentable distinctness of all the seven defined groups, one from the other, as presented by the Examiner.

In view of the foregoing comments, it is respectfully urged that the Examiner reconsider and withdraw the requirement for restriction and provide an action on the merits with respect to all the claims.

Respectfully submitted,



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